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THE STUDIES

AND

METHOD OF TEACHING

IN

PRUSSIAN SCHOOLS.

BY W. WITTICH,

Native of Tilsit, Prussia

NEW-YORK:

PUBLISHED BY THE AMERICAN COMMON SCHOOL SOCIETY,

128 Fulton-Street

1838.

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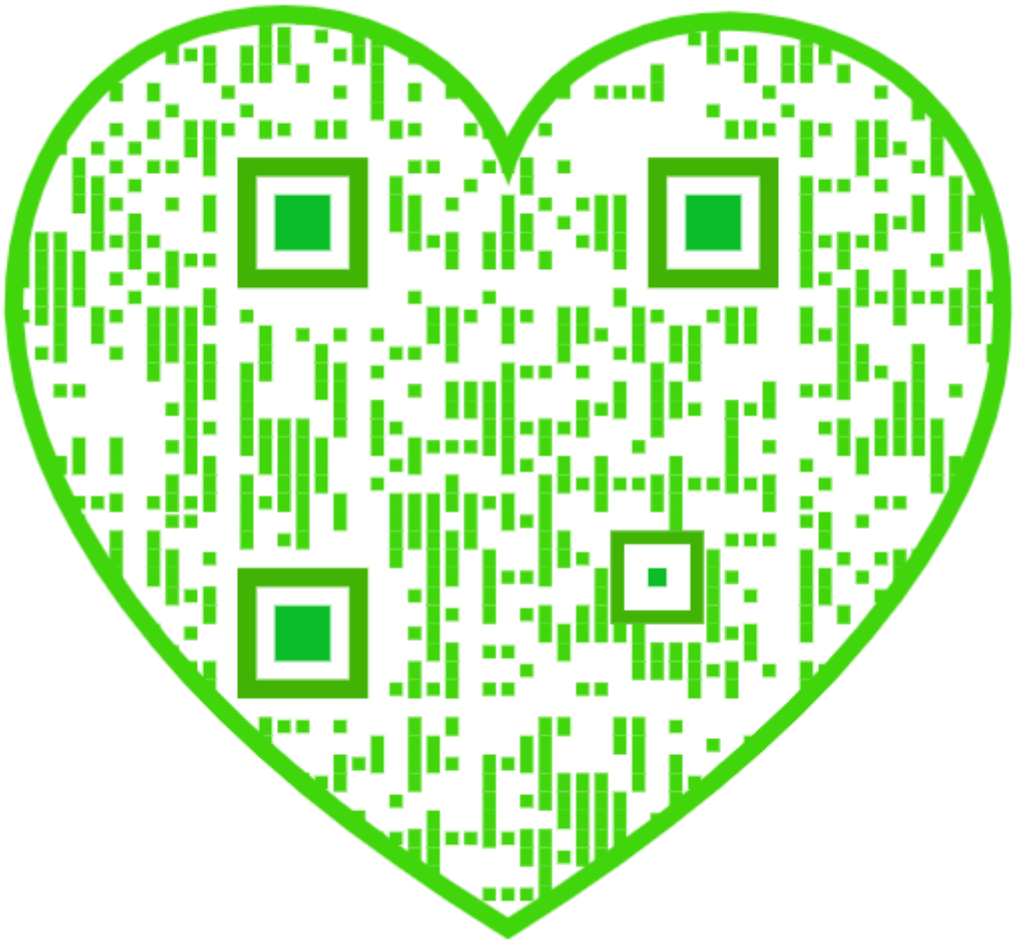

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THE elementary schools of Prussia, which for some time have attracted, and still continue to attract, the attention of every observer of and well-wisher to education, did not attain their present superior state at once, but by degrees. The progress of their improvement was at first very slow, and almost imperceptible; but in latter times it has made rapid strides, and become obvious to every one who has directed his attention to the education of the laboring classes.

Up to the year 1770, the whole system of education in Prussia was in no way superior to that adopted in England, nor was it materially of another character. The only difference which then existed referred to the grammar-schools and the universities. The general instruction of the students was to be completed, or nearly so, in the schools; and for that reason the law did not admit them to the

universities before the completion of their eighteenth year. At the universities they had to apply themselves to the acquirement of those branches of knowledge which were necessarily required for the due performance of their future duties as clergymen, judges, magistrates, and physicians. The difference between this system of instruction and that which prevails in England is obvious, and still exists.

At that period the elementary schools for the poorer classes were in a very low condition, which was the more to be regretted, as the immense distance between elementary and grammar-schools was not then filled up by any of those middle schools which at present afford the appropriate degree of instruction to such a large class of society. The merchant had no alternative but either to send his son to a grammar-school, where he was instructed in many branches of knowledge quite useless for his future prospects in life, or to place him in an elementary school, where only a few rudiments were taught, and these too in the most negligent manner. Instruction in these schools did not then extend beyond reading, learning the Catechism, a few passages of the Bible, and some hymns by heart, a little bad writing, and the casting up a few simple and easy accounts. Public instruction was then a mechanic art, not unlike that of a cobbler; for teaching was synonymous with filling the memory of a child; reading was imparted by the most simple method of syllabation, and arithmetic without the least indication of the natural relations existing be-

tween numbers. At this time any man was deemed fit to hold the office of schoolmaster in an elementary school. If he was uninstructed in some branch of the requisite knowledge, the study of a few days or weeks was considered sufficient to supply the deficiency. Hence it happened, that most of these teachers were persons who had previously tried their fortune in some other business and had not succeeded. They commonly continued to practice their art—as mending old clothes, etc.—either after school time, or even sometimes during the attendance of the children. The discipline was as simple and as ineffective as the method of teaching—consisting of a continual use of the stick.

When, after the termination of his long wars, Frederic the Second began to direct his full attention to the internal improvement of his territories, the low state of education did not escape him. He caused the existing laws respecting the attendance and establishment of schools to be enforced as far as they were efficient, and such additions as he conceived to be required were made by new laws; while he charged the clergy, under whose guidance the schools for the lower classes were placed, to direct their attention to the improvement of them. At the same time he made an endeavor to introduce some change into the modes of teaching, and in discipline. He was desirous that the latter should not depend solely on the use of the stick, but be partly effected by an excitement of the feeling of ambition. The children were to be made ac-

quainted, at least in part, with the principles on which the knowledge which was imparted to them rested: it was likewise ordered that some portion of the instruction was to have some connexion with their future life, and to be useful. In accordance with the views of the monarch, great changes were introduced into the elementary schools. In teaching how to read, much more art was displayed. The import of the single letters was dissolved into their fundamental sounds, movable letters were used, tables for reading invented, etc. These, however, were comparatively trifling matters.—More important was the change in other branches of elementary instruction. Writing was directed to useful purposes, and carried so far, that the most clever boys were enabled to write short letters, though only in a slovenly way and with little correctness. Mental arithmetic was introduced.—Learning by heart was only retained for the Catechism and selected passages of the Bible. The practice of reading books, by which the children could acquire some knowledge of life and of the world, was introduced. But, in despite of the efforts of Frederic, these changes were adopted only in a few schools to their full extent; as, in the great majority of instances, the teachers themselves were too uncultivated to comprehend, or to apply, these new methods. In the schools of some towns, however, they took firm root. The continual efforts of an able and humane nobleman, Von Rochow, to introduce them into the elementary

schools of the country, did not produce the wished-for effects. In Hanover they became more general than in any other part of Germany.

Though the efforts of Frederic for improving the instruction in the elementary schools did not produce the expected effects, they were not altogether without influence upon the progress of instruction; for no sooner did the public understand that instruction could be imparted on more rational and more humane principles, than they wished to procure such instruction for their children. This gave rise to a considerable number of private schools, in which these principles were adopted and carried into practice with tolerable success. In the larger towns some other branches of knowledge were added to those which had been previously taught; and the improvement of these schools was so rapid, that after a few years, some of them set up as rivals of the grammar-schools, and a few even with success. Those which attained the highest degree of celebrity, were the institutions of Basedow in Dessau, and that of Solzmann in Schnepfenthal. They did not teach the Greek language, as being of very little use in practical life; but, on the other hand, they introduced many other branches of knowledge, which at that period were excluded from the then grammar-schools, especially natural philosophy and natural history. Besides, they introduced other methods of teaching, in languages too; and though, at least in the latter instance, these new modes were more superficial than those of the grammar-

schools, they were likewise more easy and less tiresome. This led soon to a material improvement of the grammar-schools themselves. Their conductors became soon aware that the private institutions owed their superiority to the introduction of such useful knowledge as natural philosophy, natural history, and modern history, and they were not backward in imitating them in this point.—Though it was at first conceived that this could only be effected at the expense of the ancient languages, it was found by experience that a judicious œconomy of time rendered the sacrifice of these languages unnecessary. With the new branches of knowledge, the methods of teaching them used in the private institutions were also adopted, and this had the effect of modifying by degrees the old stubborn mode of teaching the ancient languages. Now, for the first time, it became generally understood, that teaching is an art of great difficulty, which can only be acquired by long practice, although a regular course of instruction may materially aid persons desirous of mastering it. This discovery advanced the cause a step farther. It gave rise to the establishment of the *pædagocical* and *philological* seminaries, in which persons who had enjoyed an university education were instructed in the methods of imparting a knowledge of the sciences as well as of the ancient languages.

While these important and rapid improvements were taking place in the instruction of the higher classes of society, the schools instituted for the

lower classes remained as they were, if they did not fall into even still greater neglect. In this state they continued up to the beginning of the present century. Before it commenced, however, a man appeared, gifted with all the rare qualities of a great and useful reformer. Pestalozzi had begun his great work in Switzerland. With a clear head and a sound sense, he united a profound knowledge of human nature and the daring boldness of a reformer. He was, besides, possessed of that perseverance which alone can bring a great work to its termination, and with that love for mankind which prompts man to undertake a difficult work without expecting to derive personal advantages from it. He began his work with investigating the mental powers, and the manner in which they are gradually developed in children, and to this development he adapted both the subjects to be taught and the mode of teaching them. It would lead me too far to explain here the results of his investigation, and the attempts which he made to bring his teaching into strict accordance with them. Those who desire to know them, will find them in Pestalozzi's book entitled "How Gertrude instructs her children." Although some of the modes of teaching, adopted and practised by Pestalozzi, have been abandoned, he must be considered as the founder of the new system of education. He was the first to raise teaching to an art based on a knowledge of human nature. It was, therefore, to be expected that he should commit some errors. Human nature, as is well known,

exhibits itself under such numberless shapes and appearances, both in its external form and mental powers, that the mind and experience of one man is quite unable to comprehend them in one view, and to subject them to unalterable laws.

As this system of education was only adapted to the instruction of the lower classes, it probably in a short time would have been forgotten, if it had not been taken up by the government of some countries. The lower classes are nowhere capable of paying for their children such a sum as will maintain private schools in which teachers are employed who have attained the degree of knowledge required for instructing them with effect according to the system of Pestalozzi. With the death of the founder, and that of a few of his disciples, whom he had succeeded in inspiring with a part of his own zeal and enthusiasm, his great invention would have been forgotten, if some of the republics of Switzerland, a few princes of Germany, and the Prussian government, had not thought it a matter of great importance to transplant it into their elementary schools.

Some historical notices on the introduction of this system into Prussia, are found in the Quarterly Journal of Education, No. XX. p. 267, where an account is given of the seminary for schoolmasters established in the Orphanotrophy at Konigsberg. I, therefore, shall not enter into this matter, but give a short account of the present state of the elementary schools in that country. First, I shall lay down the leading principles on which the education rests, and

then proceed to notice the things which are taught, and the methods adopted in imparting every branch of knowledge.

The first leading principle, which may be considered as including all the others, is that instruction is not the same thing with stuffing the memory of children with a great number of facts and notions. It is rather to be directed to the other mental powers, which are to be roused, developed, exercised, and cultivated. It farther has to refine and to moderate the passions, to cultivate the religious and moral feelings, and to direct the mental activity to good purposes. It is evident that this object cannot be attained by pursuing one general plan of instruction, and that the individual qualities of every child must not be lost sight of. Instruction, therefore, ceases to be a handicraft, to be exercised according to a few simple rules in an uniform manner; it becomes an art; and as the intimate combination of extensive knowledge, sound sense, and a profound acquaintance with human nature, is required for the purpose of exercising it with good success,it may with truth be called a very difficult art.

Teaching, in its common signification, and *instructing*, are by no means synonymous; as the former generally implies only the imparting of some kind of knowledge, and the impressing it strongly on the memory of the student. But instructing means to help the student in acquiring or appropriating to himself any kind of knowledge, or in forming the habit of performing certain tasks with

facility. This cannot be effected without a steady activity of the mental powers on the side of the student; and where this activity is not excited and kept up, the desired end cannot be attained. In endeavoring to create this activity, the art of the teacher displays itself most conspicuously. His business is not to save to the students all trouble and labor by explaining everything to them; but he must have sufficient sagacity to distinguish where, and how far, the knowledge and mental powers of the child alone are sufficient for the performance of the task, and where, and how far, his own interference is required. A teacher who, following up this idea, has acquired by experience a certain tact in thus dealing with the children under his care, may be certain that he will succeed in exciting and maintaining their attention, and in implanting in their minds a thirst for knowledge and the habit of mental activity.

Explanations on the side of the teacher, and performances on the side of the children, will therefore follow one another alternately. In giving the children tasks to perform, or problems to solve, the sound sense and experience of the teacher are put to the test. They must be neither too easy nor too difficult. In the first case the attention of the child slackens, and relapses into inactivity; in the second it makes perhaps repeated efforts, but, finding them useless, it becomes discouraged and remiss in its work. If either of these cases happen repeatedly, the mind of the child gets into the habit

of working at the best only by starts ; and if the whole course of teaching consists of such mistakes on the part of the teacher, there will be a danger of all mental energy being drowned by his want of capacity for the due performance of the duties of his office.

It cannot be expected that the teachers of the lower classes should be possessed of such an extensive knowledge of all the branches in which they are called upon to give instruction, as unassisted to be able to arrange every part of them in such a form as is required by the continually changing peculiarity of each pupil; nor is it possible that they could acquire it in the short time they pass in the seminaries. Books and treatises, written systematically, in a scientific order, can afford the teacher very little aid. They teach him only the matter, not the manner in which it is to be brought before his pupils. To digest this matter so that it may serve the purpose, is commonly a very difficult task, and frequently above the powers even of educated men. Numerous school books on all the subjects which are taught in the schools of the lower classes have been composed for the express purpose of assisting the teacher in this most difficult part of his duty. In no country are such books printed in so great a number as in Germany, nor are they anywhere composed with as much care and attention to the order and connection of their parts. In latter times, German writers occupied in composing school books have begun to distinguish with a great

degree of discrimination between books affording only instruction for those who study them by themselves in a scientific way, and those in which matters are arranged as they are to be laid before the beginners, and to be imparted by teachers to children. In reading these performances, it is evident that great care has been taken to connect the first principles of every branch of knowledge with the ideas which may reasonably be supposed to exist previously in the minds of children. Not less attentive have they been to arrange the contents so, that they constitute a continual and equal progress. It farther is commonly found, that all the objects have been well digested, and that the authors have had a clear conception of the end which they strived to attain, and which most of them have attained. The multiplicity of these books, and the different ways in which they are arranged, render it a much more easy matter to the teacher to adapt his instruction to the capacity of the children, than could be imagined at the first view.

Less successful have been the endeavors for improving moral education; partly because the same passions, affections, and feelings, are not so continually in activity as the mental powers; and partly because the regulation and cultivation of many of them are intimately connected with domestic education, over which, of course, the teacher can obtain very little influence. The different means by which it has been tried to obtain this end, have also been for the most part very defective; some

teachers, especially those of the older school, are still of opinion, that the moral improvement of children is to be attained by a strict vigilance on their inclinations, habits, and vices, and by prompt application of severe punishments, for the purpose of rooting out such habits and propensities. But this system has reasonably been objected to by others, who observed, that at the best it was only a negative education, its object being only the rooting out of vices, and not the implanting of moral feelings and virtuous habits. These educators observed, that those fields which remain uncultivated, and were not employed to produce useful plants, are the most quickly overrun by weeds. Other teachers adopted a quite different system. They thought, that admonitions, exhortations, and reasonings, would not fail to bring about a change in the minds and habits of the children, and they resorted to them as often as opportunity offered. But this, too, had not the wished-for effect. The boys soon got so accustomed to these exhortations and reasonings, that they did not mind them any longer; and what was worse, they became unmindful of every kind of reasoning and remonstrance,—a circumstance which ought carefully to be avoided.—Thus, it has now become the prevailing opinion among the most zealous promoters of education in Prussia, that neither of these two systems can bring about the wished-for improvement in the morals of children; and although some of the various means which have been devised for obtaining

that end, may be occasionally resorted to, that it is only from the moral qualities and the personal character of the teacher that any improvements in this respect can reasonably be expected.

The subjects taught in the elementary schools have been increased in number, while at the same time each is pursued to a much greater extent than formerly. This improvement has been effected without great difficulty by the aid of teachers who have been regularly trained up to the business in seminaries established for the purpose, where they not only acquired the art of teaching, but also that of systematically disposing of their time and of using it to good purpose. Reading and writing, which formerly constituted the greatest part of instruction, are at present considered only as parts of the study of the *native language*. The casting of a few simple accounts, which forty years ago were thought the height of erudition to be obtained in elementary schools, has been pursued to the *mathematics*. Under the general name of *knowledge of the external world* are comprehended the first elements of geography, history, natural history, and natural philosophy; none of these objects formerly were brought before the children in these schools, except in a few disjointed notices in the course of reading-books. A new subject has been lately added to this list, namely, *drawing*. The instruction in *religion* and *singing* has much increased in intrinsic value, and is likewise carried to a greater extent.

I shall now speak separately of each of the six subjects of instruction in the elementary schools; and in doing so I shall first notice the manner in which the children are led to make the first steps, then make some observations on their farther progress, and at last indicate the point at which the course of instruction terminates.

1. *Native Language.*—(Muttersprache.)

It has been for some time an object of dispute how far the native language ought to be taught in elementary schools. Some did not extend it beyond reading, writing, and some easy compositions. But others maintained, that a sound knowledge of the language is intimately connected with a knowledge of our own conceptions and feelings, and also with an acquaintance with external objects; that the language frequently indicates distinctions, founded in nature, but not obvious to careless observers; and that on those accounts nothing is more conducive to the cultivation of the minds of children than an accurate insight into the structure of their own language. These persons, with reason, pointed out the advantages arising in the grammar-schools from the study of the ancient languages, and thought it not improbable that similar advantages might be obtained by the study of the native language alone, if properly conducted.

Instruction in the mother tongue is commonly divided into two different courses. In one, the chil-

dren are made acquainted with the internal structure of the language, with its laws and rules; in the other, it is studied as the means of expressing conceptions in speech and in writing.

No matter, perhaps, has more occupied the reformers of education in Germany, than the discovery of the best mode of teaching to read. Numberless proposals have been made, and experiments tried. At present they seem to have come to the conclusion, that the shortest way is to teach writing and reading together and at the same time, and that nearly every method for obtaining the object has the same effect, if it is not too artificial. As a preparatory step, some exercises are to be made. The little children are caused to pronounce simple sounds and words to give more pliancy to the tongue, and they must draw lines in different directions to obtain steadiness in the hand. From this point reading and writing proceed together so as alternately to aid one another. In the progress of writing, *orthography* is gradually attended to; and the same object is farther obtained by the analysis of many words which occur in reading. The attention is then directed to reading with the proper accent and emphasis, and calligraphy is united with the use of the most natural and proper expressions. These exercises are followed by compositions of different kinds; by attempts to attain propriety in reading poetry and songs; and lastly, by reading tales and events, and by giving descriptions of natural objects. This is what is called the

practical course of teaching the native language; and many teachers think it sufficient, if they add the most necessary and obvious rules of grammar and construction.

Others, however, think it advantageous to enter with the older and more advanced boys into a theoretical course, giving an explanation of single sounds and words, and treating more extensively the formation of the different sentences and the composition of periods. To render this instruction less tiresome to children, and to arrest more effectually their attention, the teacher gives it in continuation with sensible objects, a knowledge of which they have obtained in what is called *knowledge of the external world*, and at last they introduce some exercises on the logical order of expressing our conceptions.

2. *Mathematics.*—(Grossenlehre.)

This branch of knowledge extends in the elementary schools to arithmetic and geometry; and their introduction into the schools, as well as the present manner of teaching both, are due to Pestalozzi. Before his time, arithmetic, as taught in these schools, consisted only in writing on slates certain numbers and accounts according to certain rules or keys, without any knowledge of their true relation to one another. Pestalozzi founded a new system by dissolving all the rules into their elements, and resting them on the evidence of the

senses. The exercises he introduced for obtaining this object, made such a conspicuous feature in his system of instruction, that many people who did not look farther into the matter, thought that he had only invented a new method of casting accounts. Though he did not neglect geometry, it occupied a less conspicuous place in his system than it ought, according to the opinion of the more modern teachers. They have therefore introduced some changes in this branch.

The first step in teaching arithmetic is to cause the little children to count the objects which surround them. When they can do this with ease, and the teacher desire that they should be able to count greater numbers, he gives them numerous small things, as beans, pieces of wood, cubes, &c., and causes them to count them. In these exercises the four fundamental rules may easily be interwoven. For instance, when there are five beans, how many must the child add to have eight; how many must he give to his neighbor, when he is only to keep four himself; how many will each one receive when six beans are to be divided between two boys; how many times must the child receive three beans from his neighbor, if he wishes to have nine. Every time the child is unable to give an answer, the beans themselves are placed before him, that he may find it out in a practical way. When these preparatory exercises have been carried on for some time, the children commence to manage abstract numbers; and in the beginning their import is

commonly indicated by lines, as it is done in the arithmetical tables of Pestalozzi. This is done in the first instance with very low numbers, and the progress to the higher is very slow; after some time, arithmetic in figures is united to mental arithmetic, and abstract accounts are mixed up with others applied to occurrences in life. The theory of the fractions is also deduced from the evidence of the senses, and afterwards the proportions are explained and impressed by numerous exercises. At last, arithmetic is applied to geometry. It is thought that neither algebra nor the extraction of quadratic and cubic roots should be taught in these schools, except in towns, as they would take up too much time.

Every elementary school is commonly divided into three sections or classes, even when there is only one teacher, and the whole course of arithmetic is distributed accordingly.

First class (children from 6 to 9 years old): Preparatory exercises. Mental arithmetics, in whole numbers for the four fundamental rules.

Second class (from 9 to 12 years old): Mental arithmetic in the decimal system. Arithmetic in figures in whole numbers. Fractions without and with figures.

Third class (from 12 to 15 years): Proportions. Application of the whole to actual cases, without and with figures.

The course adopted for teaching geometry is similar. It does not begin with definitions and

axioms, or with lines, but with instruction by the evidence of the senses. The regular geometrical bodies are shown to the children; and they, themselves, without explanation, find out the differences. Then the teacher points out the form of them, and proceeds to explain planes and lines, as the boundaries of the bodies. The theory of forms and space (Formlehre and Grossenlehre) are by no means separated, because form and space are always coexistent and interwoven with one another. As they proceed, lines, planes, and bodies, are always treated together, as constituting one object, and thus stereometry forms an important branch of this instruction. In teaching geometry, as well as arithmetic, three sections are observed:

1. Forms of the bodies, acquired by the evidence of the senses; which may be compared with counting in arithmetic.

2. Comparison and measuring, which is similar to the four fundamental rules.

3. Proportions.

In every one of them enters a part of the theory of lines, planes, and bodies. But the teacher must have sagacity enough to arrange matters so, that the succeeding instruction not only appropriately follows the preceding, but is also partly deduced from it. At the same time, he must avoid problems which have little connexion with the business of life, and must introduce in his instruction what occurs in the mechanical trades, for instance, in those

of carpenters, cabinet-makers, bricklayers, wagoners, coopers, &c.

3. *Knowledge of the external world.*—(Weltkunde.)

Like every other branch of instruction, it begins with impressions on the senses. A child must first have acquired an idea of the objects constituting the world about him, before he can bring them into connexion with one another. Every child brings a smaller or greater number of more or less correct impressions to the school. The teacher must be attentive to increase their number, but he must also show his good sense in choosing those that are the most important and most essential for the progress of education. These preparatory exercises may be made in the fields or in the school. In summer, the teacher takes the children to the fields, and directs their attention to every object that occurs to their eyes. Distances of the road are estimated, and then measured by paces; flowers are looked at and their single parts examined: stones are picked up; and butterflies, chafers, and worms, are not permitted to escape attention. Their observation is directed to hills and valleys, rivulets and brooks, ponds and ditches, gardens and meadows, fields and woods. But it is not the eye alone which is to be exercised; the ear also must be learning to discriminate, and every sound is to be followed up for the purpose of discovering whence it proceeds. The other senses also are

sometimes used, especially in the examination of plants and flowers. The teacher must be assiduous to bring a great number of objects before the children, and to impress on them as perfect a notion as possible. The more intimately the child becomes acquainted with the objects of the creation, the more he will love them, and the deeper will be the impression which they make upon his mind.—The garden of the teacher also is used to increase their knowledge of several plants and trees.

The preparatory course varies in the winter.—Then collections of natural objects are placed before the children; for instance, of different kinds of wood, of roots, seeds, mosses, stones, &c.; as likewise some productions of art, as stuffs, metals, &c. The most common objects are here also the best.

When in this way the children have become acquainted with a great number of objects, the teacher puts several of them together, and causes his pupils to compare them, to arrange them according to their similarity. He frequently orders the children to describe the objects which they have seen, either by words or in writing, because in this way their ideas increase in clearness and accuracy. But this is only done towards the termination of the preparatory course; the senses are, as it were, to be first satisfied before reason can begin to operate with effect. When this has taken place, a few objects subjected to the senses are able to rouse a great

number of ideas and observations, because reason then suggests them in crowds.

The teacher must endeavor to induce the children to arrange all these things in a certain order, as being of great importance both for the increase of knowledge and for the business of life. He must also insist on correct language, and a strict connection in the children's ideas. But in the beginning, he must be somewhat indulgent respecting the latter point, that the conception may not be drowned in the word.

When good figures of animals, either in prints or in casts, are easily to be obtained, they are also used in this preparatory course; but the principal object must always be to see the thing itself, and in its natural state. Thus, dried plants have less value than those newly gathered, and these again less than those which are still on the ground. Live animals are also preferred to those that have been killed; for it is not the form alone which constitutes the animal, but its peculiar manner of walking and moving also.

It is evident, that this kind of instruction cannot be brought to a termination in the time children attend schools; because it extends not only over all natural objects, but also over all those produced by the arts and trades of men. It comprehends, therefore, some knowledge of most of those objects which are treated of in the extensive sciences of natural history, natural philosophy, and technology.

The teacher frequently finds an opportunity to

add to the instruction by the senses some interesting mental instruction. In showing plants which are cultivated, he takes some notice of the manner of their cultivation. In exhibiting the figures of animals, he gives some account of their modes of life and peculiar habits, etc. But the impression on the senses themselves must always be the principal end to which the instruction is directed, else it is likely that the child will conceive a wrong idea of the object.

After such a copious preparatory instruction, the teacher begins a regular course, which consists of aiding the children to acquire a correct idea of the place in which they live, of its neighborhood, the district in which it is situated, of the province to which it belongs, and lastly, of the monarchy. The place in which children live, is, properly speaking, their world; and many persons, during the entire period of their life, have not an opportunity of seeing more than the villages of their neighborhood and one or two towns.

The school-building is the first object to which the attention of children is called. The school-room is first measured by paces, and drawn on a small scale on a paper. Then the things, fixed within it, are added. The teacher then begins to acquaint the children with the materials of which the building consists, and of the persons and tradesmen who have been employed in erecting it, showing them also the tools which they used. Afterwards he directs their attention to the objects which are in

the room, to their peculiar qualities, and the purpose for which they are placed there. Then he passes to the persons who live there, to their occupations, duties, etc.

Having in this way impressed on the mind of the children clear conceptions both of the whole of the building and all its parts, the teacher passes to the village or town. First the plan of the place is drawn, paying regard to the cardinal points, the inequalities of the surface, the roads and paths, and the division of the fields. In this operation the children measure the distances by paces, and pay exact attention to them in the drawing. They also notice the names of the proprietors of the ground. Their attention is next directed to the quality of the soil, and the stones and rocks occurring in it. This is followed by noticing the plants cultivated in the fields and in the gardens, and the animals which are reared by the villagers or kept for use. The wild animals occurring in it and its neighborhood, are not omitted, or the trees and shrubs found in the adjacent woods. The teacher then leads them to the inhabitants of the village or town, observing first the number of the population, and the trades which are carried on. He afterwards notices the political and religious institutions, and concludes this instruction with giving an account of the most important historical occurrences.

After this the view of the children is extended over the district in which the village or town is situated. The teacher first draws the outlines of a

large map of it on a board, and causes the children to copy it on a smaller scale. He then inserts the rivers and most remarkable mountains, and afterwards the villages which are situated round the village in which he teaches. Afterwards he places in their true situation the different towns, and the roads connecting them with one another. In doing this, he notices the places where the road traverses a range of hills, and where it passes through a river; and whether the latter is passed by a bridge, a ferry, or a ford. If some part of the district is distinguished by a peculiar branch of cultivation, it is taken notice of, and its peculiarities are described. The teacher likewise mentions the places where minerals are found, and gives a short account of them and the manner in which they are procured. He then enlarges somewhat on the industry of the towns, and terminates with noticing the courts of justice and political institutions.

In passing from the district to the province of which the district forms a part, the teacher continues in the same order; but the information is here of a more general description, and still more so when he passes from their own province to the other provinces of the monarchy. Then he concludes the instruction with a few notices of the statistics and political institutions of the whole monarchy.

In every section of this course, the instruction affords, 1, a knowledge of space and distances, with the inequalities of the surface occurring in

them ; 2, a knowledge of rocks, kinds of earth, and every thing that constitutes its soil and contributes to its fertility, as climate, exposure to certain points of the compass, etc. ; 3, a knowledge of the cultivated grains and plants, and also of those in a wild state which occur most frequently, or have some use in domestic economy ; 4, a similar knowledge of domestic and wild animals ; 5, a knowledge of the inhabitants, their trades and occupations, their intercourse and religious creed ; 6, a knowledge of the present political institutions, and of the most remarkable historical events. Every section, therefore, contains the geography, mineralogy, botany, zoology, agriculture, technology, statistics, and history of that portion of their own country which it has the object to make known to the children.

One of the most zealous promoters of the instruction of the lower classes in Prussia, Dr. Harnisch in Weissenfels, says : "I am of opinion, that a teacher who imparts in this way the knowledge of their own country to his pupils, has taught them things of much more importance than he who causes them to learn by heart the names of the capitals of all the kingdoms, and those of all their provinces, on the surface of the globe ; and who speaks to them of the history of Greece and Rome, whilst their attention is never directed to the objects which surround them."

If at the end of this course his pupils do not leave school, the teacher passes to the other countries of Europe, and to the other parts of the globe. Here, of

course he gives only a general view of the countries, and adds to it only the detail of a few remarkable objects, as the description of plants distinguished by some particular qualities; of some singular and curious animals, as alligators, elephants, etc.; or an account of some peculiar occupations of men among distant nations, etc., or of some extraordinary phenomena of nature, as volcanoes and earthquakes, etc. In this part of the instruction, the objects of course vary according to the knowledge of the teacher himself, and his good sense in selecting them.

4. *Drawing.*

It had for some time been an object of controversy, whether drawing should be taught in elementary schools. Many rejected it on account of its entire uselessness in future life; but others thought that the inclination which nearly all children evince for drawing and making figures of wax or clay, should be laid hold of for the cultivation of their mind. They observed, that besides cultivating their feeling for beauty and their taste, this occupation accustoms them to cleanliness and order, two great qualities in a moral point of view. They farther stated, that the knowledge of drawing is not quite useless, but of considerable value in different trades.

The first step consists in putting before the children different forms, especially the regular geometrical bodies and the crystals of minerals, and then

several good prints and pictures. If an opportunity offers, their attention is to be directed to some pictures and statues in the church; to the form of the pulpit, of the altar, the baptistry, etc. In looking at the geometrical bodies, they must be made to observe their planes, edges, and corners, and thus become more intimately acquainted with them. Then the instruction begins with drawing straight lines on a slate, first parallel, to the upper or lower edge and the lateral edges, then with an inclination to the right and left; then the children draw angles, triangles, quadrilateral figures, and by degrees also a circle. In this way they acquire in a short time a certain facility of the hand, and such a discerning eye that they give the just length to the drawing, do not err in distances, or in the direction of the lines. With this the preparatory course may be considered as terminated.

The beginning of the regular instruction is closely connected with the preparatory course, and forms as it were the continuation of it. The teacher orders the children to arrange straight and curved lines with one another in different groups. For instance, he causes them to fill up the inner space of a circle or quadrangular figure with straight or curved lines in a certain direction, or with both together. These lines may also be drawn with less or greater strength, and thus the children will begin to form an idea of beauty as far as it results from the contrast of strength and gentleness. By this exercise the invention of the children is powerfully

excited; but the teacher must lead it by showing them from time to time some drawings in which the lines are so combined as to make an agreeable impression. Those of the children who show slowness in their inventive powers, are ordered to copy the inventions which are made by others.

The teacher next lays before them, as examples, either prints or lithographs, wood-cuts or pictures, and accompanies them with an explanation. This explanation is necessary, that the children may comprehend the true object of the drawing, which is much more difficult in the beginning than is commonly thought. The children then copy the drawing, and in the progress of this exercise the teacher is very careful in leading them gradually from the more easy to the more difficult, avoiding in the beginning all kinds of perspective representations. The children draw sometimes on a smaller, and sometimes on a larger scale, than the copy which is before them. In the elementary schools of towns, architectural drawing is much practised.

The third kind of exercises consists of drawing from objects. The children begin with regular bodies, cubes, obelisks, columns, etc. They afterwards mix them together, so as to bring them into a perspective view. Other objects are then added, especially those of common life—flowers, different kinds of tools, and simple machines.

These three kinds of exercises, however, are not strictly separated. The most difficult kinds of draw-

ing, however, are not executed in these schools. Heads and landscapes are excluded.

5. *Religion.*

Two circumstances have occurred in later times to exclude religious instruction almost entirely from the elementary schools, or at least to limit them to a couple of hours weekly. One was the increased number of the branches of knowledge to be taught there, and the other the great indifference with regard to religion which prevailed all over Germany thirty or forty years ago. But as this indifference has by degrees given way to other sentiments and feelings, the modern reformers of the schools insist upon securing to religion a respectable place among the branches of knowledge to be taught in elementary schools. Children, they say, judge commonly of the importance of any branch of knowledge according to the time assigned to giving instruction in it, and the industry with which it is treated; and for that reason alone, religion ought to obtain the first place, and other branches ought to be brought into connexion with it as often as possible.

6. *Singing.*

Singing was introduced into all the schools of Germany at the Reformation, because it constitutes there an essential part of the divine service. In the last century, however, this branch of instruction

was much neglected, but it was re-established by Pestalozzi and his pupils.

The preparatory course consists of some exercises of the ear. Little children should continually listen to the elder pupils singing well executed songs; and when they evince any talent, some trials may be made as to whether they are able to distinguish the notes.

Some have proposed to begin the regular course of instruction with exercises in keeping time; but the practice prevailing at present consists in singing short songs to the children, who afterwards repeat them. As soon as the children have learnt to sing several songs, the exercise is not continuously followed up, but is connected with exercises in keeping time, and in distinguishing the notes. When they have made some progress, a knowledge of written music is gradually added; and as they become capable of comprehending the rising and falling of the scale in written music, the song upon which they are to be exercised is written on the board, that it may serve them as a support, and that they may get into the habit of singing from music. Farther the instruction does not extend. The most important songs are learnt by heart, because they are sung with more feeling when prompted by the memory. Every child is, besides, obliged to have a song-book, in which he enters the words of all the songs which he has learnt to sing.

The children are compelled by the law to go to school between the age of five and six years, and to remain there until the completion of the fourteenth year. The whole course of instruction is divided into four periods, each comprehending two years.

In the first period, from their entrance into school to the completion of the eighth year, the senses of the children are exercised, and they are made acquainted with a great number of objects of different kinds, with their qualities and conditions. This serves at the same time as a preparatory course for the knowledge of the external world, and of their native language. The preparatory course of the language requires, besides, some exercises in speaking and pronunciation, in which the teacher pronounces the words loudly and distinctly, and causes them to be pronounced in the same way by the children. At the same time the children draw different figures on slates; become acquainted with numbers from 1 to 100; use them in mental arithmetic, and learn by-and-by the use of coins, and measures, etc. The early exercises pass by degrees into those of reading and writing, arithmetic, and a knowledge of language. The preparatory courses for religion and singing are in some measure united. The teacher gives an historical account of the Bible, but such a one as is intelligible to children; impresses on their memory a good many easy and expressive passages, and a few easy songs and hymns.

At the completion of the eighth year, the children

know, 1, those historical parts of the Bible which are adapted to their capacities; a good many passsages and hymns, especially such as may be used as prayers; 2, the four fundamental rules of arithmetic; 3, they read and write tolerably, and have acquired a good pronunciation; 4, they sing from thirty to fifty songs and hymns by ear; 5, they are acquainted with those objects of the external world which are nearest to them, and are able to express their opinion on the most common occurrences of life. They are commonly instructed three hours a day.

The second period comprehends children from eight to ten years old, who commonly are instructed four hours a day. At the end of that period they know, 1, the essential portions of the history of the Bible; are able to apply some facts of it to life; have learnt a hymn or song for every festival, for the seasons and other remarkable occurrences, and know how to sing them: they know also passages from the Bible referring to religious tenets, moral virtues; 2, they know well the four fundamental rules of arithmetic, and have been exercised in casting accounts; 3, they write accurately, both as regards the form of letters, and the orthography of the most common words—read correctly, and make use of tolerably correct language in their discourse; 4, they sing a much larger number of songs by ear, and have begun to sing from music, and to distinguish the notes; 5, they have obtained some knowledge of the phenomena of the air, and of the

most important plants and animals to be found in their country; 6, they have been exercised in expressing their conceptions with exactness, in forming single sentences, and in repeating historical events and descriptions.

In the third period, when the children have completed ten, and have not yet attained twelve years of age, they are instructed from twenty-six to twenty-eight hours a week; and at the termination of this period, it is found, 1. That they have enriched their memory with a much greater number of passages from the Bible and religious songs; that they have obtained a connected history of the Bible, and are acquainted with a much greater number of instances which can be applied to common life; and that all this knowledge has been connected with that of the catechism, and a regular system of religious and moral instruction. 2. In arithmetic they have obtained an accurate knowledge of fractions and proportions. 3. They write calligraphically and without much error; they read not only correctly, but also with expression and emphasis; and have learnt by heart some poetry and good pieces of prose, which they repeat with ease and propriety. 4. They sing from music with some ease; and those who are most advanced are chosen to sing in church. 5. In the knowledge of the external world, they have become thoroughly acquainted with their own country. 6. The instruction in the grammatical and logical part of the language has been rather practical than theoretical,

but in some manner complete. 7. While in drawing, they have obtained a certain facility, and have been exercised both in copying and inventing. 8. Geometry has been taught only so far as it depends on the evidence of the senses.

During the fourth period, from the completion of the twelfth to that of the fourteenth year, the children are instructed from twenty-eight to thirty hours weekly; and at its termination they have acquired, 1. A complete knowledge of the religion of their church—are able to comprehend sermons both in their tendency and their separate parts. 2. They are acquainted with all kinds of complicated accounts, and are able to solve algebraic equations of the first degree. 3. They know how to read books loudly with the due expression—how to use them for the increase of their knowledge, and how to make abstracts from them; they have acquired some facility in compositions which refer to the occurrences of common life, and their penmanship is good even when writing quickly. 4. They know a great number of songs, especially hymns; and when they have a good ear, are able to make out the tune of a song from its music. 5. They have obtained a general view of the geography and most remarkable productions of the various countries of Europe, and of the other quarters of the globe; so that they have some idea of the extent of the creation and the activity of the human race. 6. They have terminated the knowledge of their native language, being able to express their notions with dis-

tinctness, to distinguish the parts of speech, to analyse the sentences and periods; and as they also have become acquainted with the most common poetical measures, they are able to recognise them in the poetry which they read; they have also contracted some acquaintance with a few of the classical authors of their native language. 7. They have been exercised in perspective drawing, either of houses, or objects of domestic economy and models; every one according to the probable use he may be able to make of it in the future business of his life. 8. They have terminated the course of geometry, with different applications of it to common life.

The reader, doubtless, wishes to know whether in every elementary school in Prussia all these branches of instruction are carried to the extent I have mentioned. This is very far from being the case. It has, however, been tried with good effect in a few country schools, and is strongly insisted on in town schools. In the latter, it is possible to execute the plan in all its extent; for in them the school house is commonly large enough to afford three school rooms, and there are also in general three teachers employed in it. This number of school rooms and teachers is required to carry the whole plan to its termination. One teacher cannot by the whole course of his teaching impart a larger amount of knowledge than that which has been noticed as the acquirements of the second period; and even two will find it a hard task to impart to them all that

in a complete school is learned in the third period. The success of their attempts will not only depend on their skill, but also on the number of children which they have to instruct.

The Prussian government has not yet thought it expedient to determine by a law the number of children which are to compose a class, and to be taught by one teacher. The reason is obvious. The number determined by the law must have fallen considerably short of that which at present attends a class; and such a law would, of course, have obliged the school communities to erect numerous school houses, and to provide for the maintenance of many additional teachers. Though the public seems aware of the necessity of a better instruction for the lower classes, and is ready to promote the views of government in this respect, it would doubtless have thought that such large pecuniary demands upon them should not be made at once. Government, therefore, has wisely taken steps to prepare the mind of the public for greater exertions, by showing them by experience that it is very possible to impart a greater, and at the same time a much more useful quantity of knowledge to the lower classes. This object it tries to obtain by the erection of seminaries for the education of teachers of the laboring classes. Meanwhile, the number of pupils attending a class is by far too large to enable one teacher so to instruct them as to have the least regard to the individual talents of each child. Dr. Harnisch mentions cases where he

found that one teacher had two hundred pupils placed under his care. He says, that in Silesia it is commonly thought that a teacher cannot, with the hope of producing any effect by his instruction, manage a school of more than one hundred children; and he himself thinks that that number ought to be reduced to fifty or sixty. In the town of Breman the legislature has determined that it shall never exceed twenty-five. That of Winterthur limits the number to thirty, and some other places of Switzerland to forty. This last number has also been adopted in the school erected in Berlin some years ago, for the instruction of the middling classes.

Though the Prussian government has shown great activity and care in erecting seminaries for the instruction of teachers for the lower classes, and though at present there are about fifty of such institutions in existence in the whole monarchy, the number of the teachers who annually issue from them is thought to be barely sufficient to satisfy the present demand. At present, every teacher, when he leaves the institution, must be immediately employed in a school; although it is found that nearly one third of the young men who receive their education in the seminaries are not fit for teaching in schools: for they are either destitute of that energy of character which is so essentially required in every man who has to govern a mass of people, or of that versatility of mind which can enable him to adapt every branch of knowledge to the individual dispositions of the children. Thus it may be said

that the number of good teachers who are annually prepared in the seminaries, falls still short of the demand by one-third, and that the required number could only be obtained by the erection of twenty-five other seminaries. But if the opinion of Dr. Harnisch, respecting the number of children to be admitted into one class, is adopted,—and the opinion of such an experienced teacher must certainly have great weight,—the number of schools, or classes, must at least be doubled, which would, of course, require that the schools for teachers should increase in the same ratio. The education in Prussia, therefore, can only be said to be placed on a satisfactory footing, when the institutions for training up teachers for the lower class shall have been increased to the number of one hundred and fifty, or about one for eighty thousand individuals of the population. The government is well aware of this circumstance, and is not deterred by the difficulties that are to be overcome in the execution of their extensive plan; its conduct shows that these difficulties excite it to greater efforts and more important improvements.

W. WITTICH,
Native of Tilsit, Prussia.

How much of the *practical business of life*, do the children learn in our common schools? What is learned that assists the labors of manhood? In a word, what do our common schools *now* teach that makes THE MAN? Does the young farmer in his district school, and while he is receiving the only education he is ever to get, learn any thing of agriculture—of the nature of soils and manures? Any thing that teaches him to distinguish the different earths, and their peculiar adaptation to the different grains and grasses. Does he learn any thing of the best breeds of stock—of the best manner of raising, keeping, and fattening his cattle, sheep, and swine? Is he taught that which makes his profession useful, profitable, or honorable? Is not farming, in too many instances, *blind imitation*—thoughtless, unproductive toil—the slavish delving of the hands without the delights or the aid of intellect? This must be so, when there is no science to observe, or experiment—when, in their only education, the children learn nothing of their profession.

There should be an elementary work on farming, making known the nature of the soils, the best methods of recovering, invigorating, and preparing them for the grains and grasses, the different kinds

of manures, and their treatment,—also the best construction and architecture of farm houses, and the most improved implements of agricultural husbandry. The children may read this in the schools, instead of the thoughtless, unintelligible *rote* reading of the "English Reader," "Columbian Orator," and similar works now read, and entirely useless to children, or to the purposes of after life. Why cannot the pupils, in the school, have their minds imbued with that which they can put in practice in after life?

Do the common schools teach the children any thing concerning their SOCIAL RELATIONS? their duties to their neighbors, to their social institutions? Is the nature and constitution of their Government taught? Or, its form of administration? Are the children taught their duties to their country, or their government? Is any thing taught of the duties of public officers?—Such as the "duties of school commissioners, inspectors, and trustees;" the "duties of county commissioners, collectors, clerks, and supervisors;" the "duties of town inspectors;" the "duties of sheriffs, path-masters, and poor masters." Is there any thing taught of the "duties of referees, of justices of the peace, or of jurors?" Do the schools teach any thing of the "duties of delegate electors," or of the "duties of legislators and judges?" These offices are all open to the children, and they must one day fill them. Should not the people's schools, then, teach some or all of these important duties? Should not

the children learn something of the momentous relations they will sustain to these free institutions, to the peace of society, and to the prosperity of their fellow-citizens?

However wise a government may be, its blessings depend, in a great measure, upon the fidelity and intelligence of those who administer it. But is there as much care taken to have the laws well administered, as there is to make good laws? Are our Common Schools such that they are preparing the people for their government? Are we taking proper care of the foundation of our civil superstructure? Are not the most of our efforts, our talking, our writing, our reading, and our scrutiny, concerning who shall make and administer the laws, when we should exert our energies in preparing *every* citizen for the duties which await him? There should be a text book for Common Schools on the "Duties of public officers," and the children in every school should use it.

There also should be a text book on the first simple truths of "Political Economy." Now, the pupils are not taught the use of a circulating medium,—money; nor the advantages of exchange and commerce. The benefits of the merchant, the mechanic, and of professional men, are not taught, or seen distinctly by many. The relation of rich and poor; the nature of the mere earth without labor; what labor is productive, and what unproductive; what constitutes value and price; what makes things high or low price; or the causes of

wealth, and happiness, and safety, are not taught! No—none of these things are as yet even dreamed of in a common education. Yet these simple, attractive truths, might be taught in a very short time, *were there suitable books and teachers.* The children *waste* time enough to learn much more than we here require.

The children should, as a part of their education, also, learn something of their own nature, physical, moral and intellectual; and something of their relations to their Creator. The physical nature of man, his relations to the Natural Laws, and the causes of health and disease, the children should grow up familiar with. The moral and intellectual natures, and the laws which the Creator has given them, should be known to all, that every man may foresee and avoid the misery from their infringement. And the children should early and impressively see the requirements of the Creator, and the duties they owe to Him as their preserver and benefactor.

But are any of these things taught in our elementary schools? Yet, should they not all be taught?—taught clearly, understandingly, and practically? They may be, and we trust there will soon be introduced such books and teachers into our common schools as to prove the truth of our assertion. There is no necessity of keeping a child eight or ten years, to learn to read his primer, write his name, cipher to the rule of three, and hate books and learning for the rest of his life.

No—our schools can and *ought* to increase the MIND of the nation. They ought to enlarge its views, its productive powers, its energies, and render the people industrious, and morally and intellectually happy. The COMMON *schools should prepare men for their callings, and for self-government.*

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